

Watts Remy

From: Ray Seidler <rayseidler@msn.com>
Sent: Monday, April 1, 2019 6:19 PM
To: SENR Exhibits
Subject: The science is clear: we must ban chlorpyrifos & restrict neonic pesticides

Dear Senate Committee on Environment and Natural Resources,

To members of the Senate Committee On Environment and Natural Resources:

SB 853, a bill to prohibit the sale, purchase or use of the organophosphate pesticide, chlorpyrifos, places neonicotinoid pesticides on list of restricted-use pesticides in Oregon, amends the pesticide product registration fee provision and reduces the maximum fee for certain occupational licenses related to pesticides. will be heard before your committee.

The science is solid: Chlorpyrifos is a highly toxic pesticide known to permanently damage children's developing brain. In 2016, after years of study, the US EPA found that chlorpyrifos is unsafe at any detectable level and recommended a nationwide ban.

Also, neonicotinoids (neonics) are a class of synthetic, neurotoxic pesticides that persist in the environment many years after their application and are highly toxic to bees, beneficial insects, fish and birds. Even years after an application, neonicotinoids can kill bees outright or damage their ability to forage for food or find their way back to their hive.

Chlorpyrifos is linked to permanent IQ loss and a host of neurological harms. Despite EPA's decision to ban chlorpyrifos in 2016, the Trump Administration reversed the proposed ban in 2017. States must take action on chlorpyrifos because the EPA has failed to protect the public. This year, Hawaii became the first state in the nation to pass a ban on chlorpyrifos. Oregon should follow suit without delay.

In addition, neonicotinoids, a class of pesticides, indiscriminately kills all insects and aquatic invertebrates, and other beneficial insects that support ecosystems. Neonics also impact our ability to grow healthy and culturally appropriate food produced through sustainable methods because they are so long-lived in the environment and cannot be washed off fruits and vegetables.

I urge you to support this bill and see it through passage from your committee and on to the full Senate.

Thank you.

March 23, 2019

Oregon Senate Committee on Environmental and Natural Resources
Oregon House Committee on Agriculture and Land Use.
Salem, OR.

Dear Committee members:

I write as a scientist with about 40 years of research and teaching experiences with environmental microbiology, chemistry, and risk assessments of genetically engineered crops and their pesticides. I am a retired Professor of Microbiology from Oregon State University, and a retired Senior Research Scientist with the United States Environmental Protection Agency. I write to enthusiastically support SB3058 and SB853 to regulate neonicotinoid insecticide sales and use for homeowners and to prohibit the sale and use of the insecticide chlorpyrifos.

As you deliberate the fate of House Bill 3058 and Senate Bill SB8534 I ask you keep the following issues in mind.

Neonicotinoids (neonics) are chemical modifications of nicotine. Nicotine is the addictive chemical found in tobacco. Bee

behavior studies are consistent with bees and bumble bees becoming addicted to exposures to neos and pollinators may actually seek that chemical out repeatedly in “natural” field exposures. 1

Dr Richard Gill, from the Department of Life Sciences at Imperial College, said, “Given a choice, native bees initially appear to avoid neonicotinoid-treated food. However, as individual bees increasingly experience the treated neo-containing food they develop a preference for it.” 2 I say, simple 1-time experimental dose/toxicity laboratory studies conducted by industry for regulatory purposes therefore, may not be reflective of real-world accurate assessment of pollinator exposures. Bees may be repeatedly exposing themselves to addictive neos just like addicted humans repeatedly crave exposures to nicotine.

Other political districts in the world have already banned or restricted the use of neonicotinoid insecticides, primarily due to their multiple impacts on honeybees and native bees. For example, EU member states have voted in favor of a total outdoor ban on three neonicotinoid pesticides thiamethoxam, clothianidin, and imidacloprid across the EU in order to protect pollinators. Their use is still allowed in confined greenhouses. 3

It is incredible that over 800 peer reviewed scientific studies have been published in the last 8-10 years showing innumerable impacts of neonicotinoids on various classes of beneficial non-target organisms and little or no regulatory actions have taken place by the United States regulators. 4

Peer reviewed international studies have shown the toxic reach of neos extends far beyond just pollinators because this class of insecticides persist for years in soils and are highly mobile, moving from fields into lakes, streams, ponds, wetlands, into neighboring soils, into weedy plants, and even into the shellfish in estuaries. Neos impact activities of microbes, earthworms, and numerous other creatures in soil ecosystems. 5

One of the most important aspects about these Bills is that it will make it harder for homeowners to purchase and use neonicotinoids. This is a good thing because over half of these insecticides are bought and used by home owners.6 As a rule these folks would not be knowledgeable about neo non-target effects, know how to make appropriate dilutions of the concentrated materials, and perhaps not be as concerned about impending rain events when the neos are applied since they spread rapidly in water systems. These bills specifically target restrictions on the sale of these dangerous pesticides to none trained homeowners.

The potency of a Neo will vary with the compound but it’s about 5,000-10,-000 times greater than DDT.7 This potency makes it even harder for homeowners to make the appropriate dilutions (if necessary) and to use the insecticide properly. Properly educated and licensed professional applicators should be the only folks to use these insecticides if their use is going to be allowed at all.

Taken collectively, home owners are probably more to blame than farmers for some of the many issues associated with dispersal of these insecticides into the environment. I strongly support making neos a restricted use pesticide allowed to be used only by professional applicators.

The banning of chlorpyrifos should be one of the easiest decisions that any legislature or regulatory body can make. Various studies have documented the positive correlation between exposures to chlorpyrifos (aka Dursban, Lorsban, etc) and damage to the developing brain of babies and young children causing lowered I.Q., delayed motor development and other neurological effects. This pesticide is banned for homeowner use but it is still used commercially on a variety of fruits and vegetables that can be consumed raw (e.g. apples, broccoli). Even low to moderate levels of exposure to the insecticide chlorpyrifos during pregnancy may lead to long-term, potentially irreversible changes in the brain structure of the child, according to a 2012 brain imaging study by researchers from the Columbia Center for Children's Environmental Health.8 This study was the first to take MRI brain scans and noted, through photographs of the brain, structural brain changes that correlated with loss of cognitive functions.

As long ago as 2016 an EPA science advisory committee of experts (SAP) cited that epidemiology and toxicology studies suggest there is evidence for adverse health outcomes associated with chlorpyrifos exposures 9 The decision to ban chlorpyrifos through an EPA decision has been on and off for the last several years. The current administration has been allowed to appeal a recent decision to ban it as recently as February of 2019.10

It is long past time that this toxic organophosphate insecticide be banned for sale in Oregon.

Dr. Ray Seidler
Ashland, Oregon

Citations:

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Sincerely,
Ray Seidler
160 Pompadour Dr
Ashland, OR 97520