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Subject:
Date: July 20, 2017 at 8:44 AM
To:



To the members of the Contra Costa County Integrated Pest Management Committee and Dr. Brad Hansen:

Bees are crucial to the economic well-being of California and Californian agriculture as recognized in the California agricultural code. They are a sentinel species sharing much of the same genome as humans, so peril to bees represent peril to humans as well.

The narrowmindedness of acute and sub-lethal toxicity testing has frustrated beekeepers who are aware of the chronic toxicity experienced by many single bees; encountering glyphosate in the air and nectar and pollen of flowers, multiplied by 30,000 to 60,000 bees in a healthy hive, then worked into the honeycomb and "womb" of multiple future generations of bees.

The Study of Effects of Field Realistic Doses of Glyphosate on Honeybee Appetite Behavior published by the *Journal of Experimental Biology* in 2014, discloses that Glyphosate-containing nectar reduces bees ability to smell food sources and impairs learning and short-term memory. These skills are crucial for foraging, as bees communicate by smell, to find nectar and remember how to get back to the hive and report to the colony.

The bees tested were 2 to 3-week old bees which reflects the normally high mortality of summer time bees but doesn't address the fall- spring population which lives 3 to 4 months.

The implication is bees foraging in sub-lethal environments become vectors for poisoning the colony.

also.. Each ounce of wax for clean comb equals 10 ounces of Glyphosated honey.. but my bees aren't building new wax..this is a problem.

Glyphosate is not applied singularly, neonicotinoid and fungicide cocktails support the Glyphosate-resistant crops present additional orders of toxicity to colonies of bees.

Now, think of your children as little bees playing in the "weed-safe areas" that have been sprayed with glyphosate. This alone with the Cal/EPA OEHHA acknowledgement

Let's find something safer.

THIS is based on only ONE study and personal observation:

<http://jeb.biologists.org/content/217/19/3457>

The Study of Effects of Field Realistic Doses of Glyphosate on Honeybee Appetite Behavior