

What Pesticides Are Sprayed on Cannabis?

Beyond Pesticides,

Thank you for your work on cannabis and pesticides. I really enjoyed your article in the winter 2014 edition of Pesticides and You, Pesticide Use in Marijuana Production: Safety Issues and Sustainable Options. I'm curious whether you know the top five or six pesticides that are currently being used on cannabis. Thanks again! – Sam Z., Washington State

Hi Sam,

Thanks for your kind words on our article. Although there continues to be controversy over legalization at the state and national level, Beyond Pesticides feels it important to ensure that individuals using cannabis through state-licensed dispensaries, particularly medical users with chronic health conditions, are not poisoned by pesticide-contaminated products. Our report finds that pesticides not evaluated by EPA for health effects through inhalation, ingestion and skin absorption are being used in cannabis production.

We've concluded that it is illegal to use registered pesticides that have not been evaluated for use in cannabis production. Since the release of our report, there has been a national conversation surrounding pesticide applications to cannabis, with mainstream news outlets picking up the story. Denver, Colorado has issued recalls on thousands of pesticide-tainted cannabis plants and products, and Colorado Governor Hickenlooper (D) declared contaminated cannabis "[a] threat to public safety" through executive order. California, a state that accounts for 50% of sales, issued its first guidelines on pesticide use in marijuana production, requiring safer practices than many other states. Oregon will require mandatory testing of nearly 60 different pesticide compounds of concern. However, problems remain, as state-sanctioned pesticide lists in Washington and other states continue to allow hazards, while certain growers [attempt to] skirt restrictions on highly toxic chemicals.

Cannabis recall lists in Colorado reveal that the same illegal pesticide use is continuing to show up. Chief among them is myclobutanil, the active ingredient in the fungicidal product Eagle 20, used to treat powdery mildew, a plant disease that poses little risk to consumers. Myclobutanil is classified as a reproductive



toxicant under California's *Prop 65: Chemicals Known to the State to Cause Cancer or Reproductive Toxicity*. Insecticides used to control mite infestations, such as abamectin (another Prop 65 listed chemical), spiromesifen (associated in some studies with kidney/liver effects), and imidacloprid (a neonicotinoid linked to bee declines), are also frequently found on recalled plants.

On state-sanctioned lists, the synthetic pesticide synergist piperonyl butoxide (PBO) continues to be allowed for use. States cite its exemption from a tolerance (or acceptable residue) for food crops by EPA as the basis for allowing this and other federally registered pesticides on cannabis. Studies show it is frequently detected at high levels in cannabis products. Despite a 2006 EPA registration document indicating that the agency "will recommend . . . the revocation of the tolerance exemption..." for PBO, 10 years later it has yet to do so. Beyond Pesticides has sent several letters to the states of Oregon, Washington, and Colorado, urging that they not allow registered pesticides on cannabis, given insufficient data on health impacts. We have also put EPA on notice, as states continue to use the agency's insufficient guidance that permits the use of pesticides with general label language that are exempt from a food tolerance requirement. Beyond Pesticides is committed to encouraging safer practices within the fast-growing cannabis industry by promoting pest prevention through structural, cultural, and biological controls. When pest problems get out of hand, allowances for pesticides that are exempt from federal registration and allowed in organic production represent a route for effective pest management that also protects human health.

Share With Us!

Beyond Pesticides welcomes your questions, comments or concerns. Have something you'd like to share or ask us? We'd like to know! If we think something might be particularly useful for others, we will print your comments in this section. Mail will be edited for length and clarity, and we will not publish your contact information. There are many ways you can contact us: Send us an email at info@beyondpesticides.org, give us a call at 202-543-5450, or simply send questions and comments to: 701 E Street SE, Washington, DC 20003.

Help Us Watchdog the Government: Share Your Pesticide Incident

Dear Beyond Pesticides,

A company hired by my neighbor to control mosquitoes inadvertently sprayed me in the face with two pesticide products containing synthetic pyrethroids. The company that made the application gave me the wrong MSDS for a product containing garlic oil and rosemary, so I'm not sure what to do and am experiencing neurological effects. I have reported this incident to the state pesticide regulatory department. An inspector was able to track down the correct names of the pesticides that I was sprayed with and is conducting an investigation. I wanted to make you aware of the incident and see if you had any further suggestions.

-Anonymous

Anonymous,

We're very sorry to hear about your incident and appreciate you sharing it with Beyond Pesticides. You made the right move by contacting the state pesticide regulatory department. Although EPA is responsible for registering pesticides, it delegates enforcement of pesticide law to the states. That being said, we do recommend you also contact your regional EPA officials and make them aware of the incident and ongoing investigation. Although

state agencies are required to report pesticide poisonings to EPA, it does not always occur. We also strongly suggest that you fill out Beyond Pesticides' pesticide incident report form (located here: bit.ly/pesticidereport). The form will help you keep a written record of the event for future reference, as well as provide Beyond Pesticides with important evidence that we use to highlight the need for change. When filling out the form, please provide as much detail as possible, including, but not limited to, location, date, time, weather conditions (wind speed, temperature, etc.), the chemical or product used, and applicator license number. Please attach any relevant photos. The form provides an option for Beyond Pesticides to release this information to the media, policy makers, and other victims, and keep your personal information anonymous. In case there is further follow-up needed after this incident, Beyond Pesticides also maintains an internal reference list of lawyers and doctors, which we are happy to provide to you. Our organization monitors the effectiveness of state enforcement programs, so please keep us up-to-date on the status of your claim, and let us know if you encounter any difficulties in getting information. There are legal routes, such as a state freedom of information laws, which can be used to find out the details of a pesticide investigation. Stories like yours underline the importance of prioritizing nontoxic alternatives to manage pest problems. We wish you the best in recovering from this incident.

From the Web

Beyond Pesticides' Daily News Blog features a post each weekday on the health and environmental hazards of pesticides, pesticide regulation and policy, pesticide alternatives and cutting-edge science, www.beyondpesticides.org/dailynewsblog. Want to get in on the conversation? "Like" us on Facebook, www.facebook.com/beyondpesticides, or send us a "tweet" on Twitter, @bpncamp!

EPA Releases then Pulls Its Report that Disputes Cancer Finding for Glyphosate (Roundup)

Excerpt from Beyond Pesticides original blog post (5/6/2016): EPA Releases then Pulls Its Report that Disputes Cancer Finding for Glyphosate (Roundup). In May, the U.S. Environmental Protection Agency (EPA) published a long awaited review of glyphosate, the active ingredient in Monsanto's Roundup, concluding that the chemical is not likely to be carcinogenic to humans –then the agency removed the review from its website.

Christopher N. comments:

"Digging, weeding by hand, shovels, or hoes do not cause erosion. What causes erosion are the lightweight free particles that are constantly renewing in soils lacking carbon, humus, organic debris, mycelium, and other biological life. Trees, shrubs, saprophytic fungi, mycorrhiza fungi, humus, mulch, and manure all work synergistically to hold and catch healthy soils, while adding weight and structure. Weeding in these environments will not cause erosion to occur. Sandy, dusty dead soils are those most prone to erosion by water or wind. Examples of such soils would be Arizona, Nevada, or Northern Africa. The dust bowl was caused by over-farming the land without enough organic matter returned to the soils, which depleted nutrient content in the soil to the point that it could easily be picked up by the wind. Herbicides have no role in fighting erosion, but mushroom farms, compost and restoring forest cover sure do."

Javi G. comments:

"I find it incredible that, in the U.S., food is not already being tested to see if glyphosate is present in it. To me, it is just common sense. It definitely shows how powerful chemical companies are."