



## **Q&A from Pesticides & the Chesapeake Bay Conference November 10, 2021 – Day 1 Session**

*Some questions were answered live and those answered below were typed in by presenters.*

**Asker:** Anonymous

**Question:** How could the regulatory sphere be changed to better address the unknown health and environmental concerns about pesticides and combinations of pesticides?

**Answer:** There are certainly legislative fixes that stand no chance of passing given how dysfunctional Congress is. There are things that this Administration could do to deal with uncertainty in a more precautionary way. EPA has a lot of discretion in how it conducts its duties under current pesticide law.

**Asker:** Erroll Mattox

**Question:** Since we cannot spray our way out of the problem, is there a magic bullet on the horizon for weed management that will allow conventional farming to continue producing cheap food?

**Answer:** No, there isn't. Things have to change dramatically in a way that uses herbicides as a last resort rather than a first resort. But we need federal support and an incentive programs in place to facilitate this transition.

**Asker:** Dana Kolpin

**Question:** Great talk. Has there been a push for using more crop rotations in the fight against weed buildup?

**Answer:** Yes, that is one of the best things we can do now. The typical soy-corn-soy-corn rotation isn't going to cut it anymore. We need more complex rotations of 4 or more crops and even have a year where something like clover is planted. Many weeds that thrive in soy and corn fields have a tougher time in other crops. But more complex rotations are a big ask. It dramatically increases the logistical challenges. We need federal and state support to give farmers the tools to do this.

**Asker:** Anonymous

**Question:** With Bayer voluntarily stopping the sales of RoundUp for residential use, what product are they replacing it with and are they also combos of pesticides?

**Answer:** Roundup will probably still be sold, just with different active ingredients. Probably a mixture of two or more herbicides will become the new Roundup. Also, generic brands will likely keep selling glyphosate to US consumers, so it will still be around.

**Asker:** Anonymous

**Question:** Is there a way to decipher which fluorinated pesticides are PFAS-contaminated?

**Answer:** No, but I would say it is more of the rule than the exception. PFAS can be introduced through storage containers or added deliberately - either as an active ingredient or a co-formulant



or adjuvant. A lot of it depends on how you define PFAS and how many C-F bonds are required. Regardless, many pesticides contain fluorinated compounds. Kyla Bennet from PEER will be speaking in a future session and will have a lot of good information in this topic.

**Asker:** Anonymous

**Question:** One of the alternatives to glyphosate being touted as a safer pesticide is glufosinate. Is this pesticide really much safer?

**Answer:** Live answered

**Asker:** Eric Duce [follow-up to verbal answer re is glufosinate a safer choice]

**Question:** No, comparing the labels between glyphosate and glufosinate shows glufosinate is more toxic than glyphosate. Glyphosate has "Caution" as the signal word and glufosinate has "Warning" as its signal word. Also more PPE is required for glufosinate.

**Answer:** As far as acute harm goes, you are correct. I was speaking more on chronic harms, which are what concern me more when it comes to herbicides.

**Asker:** Dev Murali

**Question:** Are there any other countries that are doing a much better job of not using these herbicides and work more on natural process to control weeds?

**Answer:** The European Union is by far the best example of how to reasonably regulate pesticides while still allowing for thriving agriculture. Although there is still quite a bit of herbicide use in commodity crops that are grown there, like oil seed rape. Mexico has made moves to stop growing GE maize there to not only reduce herbicide use but also preserve the food sovereignty of many indigenous cultures there. But we have a long way to go in the USA and a lot of barriers to change.

**Asker:** Anonymous

**Question:** Anyone doing any research in academia or elsewhere, ie. EU, on synergistic effects of these combinations you just discussed?

**Answer:** Live answered

**Asker:** Anonymous

**Question:** Do we know what happens when there is more than one pesticide in the water?

**Answer:** Live answered

**Asker:** Anonymous

**Question:** I was reading about the use of biochar as a soil amendment. Is that the same thing as activated carbon?

**Answer:** Live answered