

## GMO Myth: Farmers “drown” crops in “dangerous” glyphosate. Fact: They use eye droppers

As a farmer, I have to laugh sometimes; it's all I can do when I run across this sort of misinformation supposedly telling me about how I run my farm. There are people out there who truly believe that we farmers douse, drown, drench or saturate our crops in chemicals, glyphosate to be more specific. Anti-GMO campaigners, organic activists and irresponsible news reports use those phrases all the time (see [here](#), [here](#), [here](#), [here](#)). In graphic form it often looks something like this meme from [GMOFreeUSA](#) pictured above.

Really?

Does GMOFreeUSA actually think we load up big tankers of herbicide and drown our crops with the stuff? First, they don't understand the meaning of the word drown; second, to really drench a crop we would have to use one of those [big tanker airplanes](#) they use to fight forest fires. The video [in this link](#), for example, would qualify as a drenching, probably not a drowning. Sorry, that simply is not what we do on a modern farm.

In fact, it couldn't be farther from the truth.

[Anti-GMO meme](#)  
Anti-GMO meme

Planting season has arrived in Iowa, and I've been applying herbicides to prepare for planting. On our no-till ground—the most sustainable form of agriculture, and it's been made possible by the use of GM crops—we use a combination of glyphosate, 2,4-D, and depending on crop either metalachlor for corn, or on soybeans it's a pre-packaged mix of chlorimuron, flumioxazin and thifensulfuron. On our tilled ground, we leave out the glyphosate and 2,4-D, as it's not needed because tillage kills the weeds that are present.

So, what about this drowning we've been reading so much about? On our corn ground, before planting we apply 16 ounces of Glyphosate, 8 ounces of 2,4-D, and 48 ounces of metalachlor per acre. To put that in perspective, it's a little more than half a gallon of herbicide spread out over an acre, or roughly the size of a football field.

For soybeans, it's even less. We start with the same 16 ounces of glyphosate and 8 ounces of 2,4-D,

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but add 2.5 ounces of the pre-packaged mix. The pre-mix is a dry ingredient, so we're putting on a pint and a half plus a couple tablespoons worth of herbicide on that same football field sized area.

In other words, per square foot, on the corn ground we apply what amounts to 1/3 of a drop per square foot. On soybean ground it's approximately 1/12 of a drop per square foot. We're not “drowning” plants in

pesticides; we're using what amounts to eyedroppers. What we do is a misting and not a "dousing".

Let's look a little closer at our goals. Believe it or not, most farmers try to minimize total herbicide use. Yeah, that's right. We don't have a special love for applying herbicides. They can be expensive, it takes resources of time and fuel to apply them, there are crop rotation issues for some herbicides and they are not sustainable, which is one of my big concerns and a concern farmers that I know.

To look at a specific example in our operation, we have two farms that we rented about 4 years ago. They has been used by another farmer who had raised continuous corn, applied liquid manure and used a minimum of two tillage passes between crops to loosen the soil, size and bury the residue and control weeds. That all changed when we took over the farms.

We started no-tilling, meaning we use not full-width tillage. Only the shanks of the nitrogen applicator and the planter disturb the soil. During the transition time, we aggressively managed weeds through herbicides. We made multiple passes, usually three per year, and used multiple modes of action. The goal was to eliminate weeds so they don't have the ability to produce seed. Once the weed seed in the top several inches of soil have germinated and those weeds controlled, our job gets much easier.

[Anti-GMO meme; No serious health issues have been linked to glyphosate according to the EPA and E](#)

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issues have been linked to glyphosate  
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Four years later, we are nearly at the finish line. We had some grass creeping in from the field edges that we needed herbicide to control, but as I planted that field, I could have pulled every weed in that field and fit them in one five gallon bucket. That's over 120 acres and probably less than one weed per acre. No burn-down herbicide was needed, and we will likely only have to use one herbicide application to control weeds in that field this year. On those farms, we will likely not use glyphosate even though we have glyphosate tolerant corn planted in that field this year.

A couple pints and a few spoonfuls of herbicide sure doesn't sound like a drowning to me. Maybe GMOFreeUSA and other dedicated anti-GMO campaigners have a different idea, but they really need to get out and see what farmers really do. It's not at all what they think.

So next time you're at Dunkin Donuts or Starbucks picking up an extra large of your favorite coffee, that's approximately the amount of herbicide we spread on a football field sized area of a field.

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