

## HERBICIDE DRIFT DAMAGE: ASSESSMENT & ACTION PLAN

*Every year, growers encounter strange leaf curl symptoms on crops that were healthy and happy just a few days prior. When they send samples to a lab or photos to their favorite technical expert, the culprit is often herbicide damage from spray drift. The Tech On Demand team encounters it quite often. In an effort to help you and your team pinpoint the cause of such issues and have a plan to address them, here are some tips.*



**Assess the Damage.** *How bad was the exposure and is it worth trying to finish the crop?*

If leaf curl and/or distortion is minor (for example, only the margin is affected and not the entire leaf) and only present on about 50% or less of the plant, chances are it will recover. Depending on severity, delay in flowering and finishing may occur, but this is a better alternative to losing the crop entirely.

If injury symptoms are severe (for example, entire leaves are curled or distorted) and present on more than about 50% of the plant, the likelihood that the crop can be turned around is low. In this situation, start looking for alternative quick-crops that can be plugged into your spring program, so you have something to put on the benches.

**Identify the Source.** *While figuring out where herbicide contamination came from can sometimes be tricky, there are a few things you can do to identify the source.*

Look for patterns. If damage is most severe closest to air inlets and symptom severity decreases the further downwind you go, injury was most likely caused by herbicide drift entering your greenhouse.

There's little that you can do to prevent drift that results from someone else's herbicide application. Closing vents and temporarily reducing air flow if you see a spray crew nearby is about the best you can do, but this isn't always possible.

If the damage is due to weed management efforts on your grounds, make sure you exercise good application practices in the future. Avoid spraying too close to vents, spraying on windy or hot days, and always follow the label instructions to avoid accidental drift damaging your crops.

**Take Action.** *If damage on your crops is due to herbicide drift from an application not made by you or your staff, the best course of action is to take a deep breath, cool down, and engage in productive dialogue with your neighbors.*

Herbicide applicators don't want to cause damage to your crops. However, they won't know it happened or understand the risks to you and your livelihood unless you engage with them. Establish procedures and communication lines with your neighbors to avoid future instances of herbicide injury.

If you suspect herbicides have infiltrated your water source, have a commercial lab test for residues. Depending on the herbicide and concentration of active ingredient in your water, impact on your crops may be transient or, worst-case scenario, long-term. In either case, secure a temporary source of clean water to irrigate your crops with. While this may be expensive and is certainly not ideal, it is better than losing an entire season's worth of crops.

If lab results show you are dealing with a potent and persistent herbicide, installing an activated carbon filtration system will likely be necessary. Even if herbicide concentrations in your water are low and crops are fine for a time after transplant, injury symptoms will start to occur at some point once plants take up enough active ingredient. Growers who wait to act in situations like this often incur significant losses and sometimes go out of business due to repeated crop failures. Act quickly, make informed decisions and don't sacrifice the long-term for the short-term, even if there's an upfront cost to remediate the issue.